WHAT IS CLAIMED ARE:

1. A non-invasive blood constituents measuring instrument comprising: a light source for irradiating light including plural waveforms to a living body; a light detector to detect light transmitted through the living body or reflecting thereon; a spectrum analyzer to which the output signal of the light detector is supplied and which analyzes spectrum of the light transmitted through the living body or reflected therefrom at different times; a spectrum subtraction generator to generate spectrum subtraction from the spectrum of the light measured by the spectrum analyzer at different times; and a blood constituents predictor into which the output data of the spectrum subtraction generator is input and which outputs the blood constituents.

2. A non-invasive blood constituents measuring instrument claimed in Claim 1, wherein the blood constituents predictor is provided with a multi-regression analyzing model using plural whole blood sample spectrum data having known blood constituent as an explanatory variable and blood constituent values as an objective variable, wherein the spectrum subtraction data obtained from bloods having known blood constituents are input into the multi-regression analyzing model as an explanatory variable, the objective variable is computed from the multi-regression analyzing model and output as a blood

constituent value.

3. A non-invasive blood constituents measuring instrument claimed in Claim 2, wherein the multi-regression analyzing model is a regression analysis model using the PLS or PCR method.

4. A non-invasive blood constituent measuring instrument claimed in Claim 3, wherein blood constituents of the plural whole blood samples are arranged at a specified interval within the range of concentration including the physiological concentration range.

5. A non-invasive blood constituent measuring instrument claimed in Claim 4, wherein the light including the plural wavelengths is the light in the near infrared range.

6. A non-invasive blood constituent measuring instrument claimed in Claim 5, wherein the light includes plural wavelengths in the wavelength band of 800 ~ 2400 nm arranged at an interval of about 3nm.

7. A non-invasive blood constituent measuring instrument claimed in Claim 6, wherein the light including the plural wavelengths is generated by separating the light from the light source by the active spectroscope.

8. A non-invasive blood constituent measuring instrument claimed in Claim 7, wherein the active spectroscope separates the light in the near infrared range at an interval of about 50 ms period of time.

9. A non-invasive blood glucose concentration measuring instrument comprising:a light source to irradiate a light containing plural wavelengths; a light detector to detect the light transmitted through a living body or reflected therefrom; a spectrum analyzer to which the output signal of the light detector is supplied and which analyzes spectrum of the light transmitted through the living body or reflected therefrom at different times; a spectrum subtraction generator to generate spectrum subtraction from the spectrum of the light measured by the spectrum analyzer at different times; and a blood glucose concentration predictor into which the output data of the spectrum subtraction generator is input and which outputs the blood glucose concentration.

10. A non-invasive blood glucose concentration measuring instrument claimed in Claim 9, wherein the multi-regression analyzing model is a regression analysis model using the PLS or PCR method.

11. A non-invasive blood glucose concentration measuring instrument claimed in Claim 10, wherein blood constituents of the plural whole blood samples are arranged at a specified interval within the range of concentration including the physiological concentration range.

12. A non-invasive blood glucose concentration measuring instrument claimed in Claim 11, wherein the light including the plural wavelengths is the light in the near

infrared range.

13. A non-invasive blood glucose concentration measuring instrument claimed in Claim 12, wherein the light includes plural wavelengths in the wavelength band of 800 ~ 2400 nm arranged at an interval of about 3nm.

14. A non-invasive blood glucose concentration measuring instrument claimed in Claim 13, wherein the light including the plural wavelengths is generated by separating the light from the light source by the active spectroscope.

15. A non-invasive blood glucose concentration measuring instrument as set force in Claim 14, wherein the active spectroscope separates the light in the near infrared range at an interval of about 50 ms period of time.

17. A non-invasive blood glucose concentration measuring instrument claimed in Claim 12, wherein the plural whole blood samples include protein containing albumin.

18. A non-invasive blood glucose concentration measuring instrument claimed in Claim 17, wherein the concentration of the albumin is about 3.0 ~ 6.0 g/dl.

19. A non-invasive blood glucose concentration measuring instrument claimed in Claim 18, wherein the plural whole blood samples contain blood having different hematocrit values.

20. A method for non-invasively measuring blood constituents comprising the steps of: irradiating a light

containing plural wavelengths to a living body; detecting light transmitted through or reflected from the living body and converting it into an electric signal; analyzing spectrum of the light transmitted through the living body or reflected therefrom at different times using the converted electric signal; generating spectrum subtraction from the spectrum of the light at different times; and predicting corresponding blood constituents from the spectrum subtraction.

21. A method for non-invasively measuring blood constituents claimed in Claim 20, wherein the step of predicting the blood constituents further comprises; preparing a multi-regression analyzing model, to which spectrum data of plural whole blood samples of which blood constituents are known are input as explanatory variables and outputs blood constituents as objective variables, inputting the spectrum subtraction data obtained from blood of which blood constituents is not known as explanatory variables, and outputting the blood constituents as the objective variables.

22. A method for non-invasively measuring blood constituents claimed in Claim 21, wherein the multi-regression analyzing model is constructed using the PLS or PCR method.

23. A method for non-invasively measuring blood glucose concentrations comprising the steps of: irradiating a light

containing plural wavelengths to a living body; detecting light transmitted through or reflected from the living body and converting it into an electric signal; analyzing spectrum of the light transmitted through the living body or reflected therefrom at different times using the converted electric signal; generating spectrum subtraction from the spectrum of the light at the different times; and predicting corresponding blood glucose concentration from the spectrum subtraction.

24. A method for non-invasively measuring blood glucose concentrations claimed in Claim 23, wherein the step of predicting the blood glucose concentration further comprises; preparing a multi-regression analyzing model, to which spectrum data of plural whole blood samples of which blood glucose concentrations are known are input as explanatory variables and outputs blood glucose concentrations as objective variables, inputting the spectrum subtraction data obtained from blood of which blood glucose concentration is not known as explanatory variables, and outputting the blood glucose concentration as the objective variables.

25. A method for non-invasively measuring blood glucose concentrations claimed in Claim 24, wherein the multi-regression analyzing model is constructed using the PLS or PCR method.